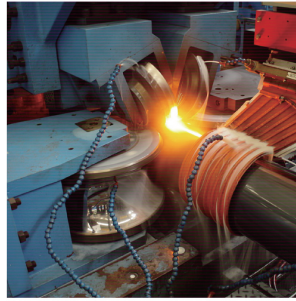




UNIVERSAL CAGE FORMING SYSTEM

The Yoder Universal Cage Forming System, originated and patented by Yoder, is based on sound mathematics and unique concepts. This method becomes more desirable and essential as the ratio of the pipe outside diameter to wall thickness (i.e., D/t ratio) exceeds 40:1 and up to 100:1 range. More conventional forming methods roll material in discrete steps or passes and employ brute force. The Yoder Cage System forms the strip continuously with smooth transitions and minimum effort. Hence, the material is actually guided through the forming mill with uniform, but infinitesimal change of shape in each small increment of pipe travel.

The buckling of strip edges in light wall pipe has been a shortcoming of the conventional pipe mill. This problem is even more evident now that higher yield strength materials are allowing pipe producers to decrease the wall thicknesses (and pipe weight) further, thus increasing the D/t ratio even more.



You can learn more about Yoder Cage Forming Systems here:



formtekgroup.com/product-items/yoder-cage-forming-system



The first installation and conversion to the Yoder Universal Cage System was completed in 1969 at Bethlehem Steel Corporation on their 16" pipe mill at Sparrows Point, Maryland, USA. It formed pipe from 5-9/16" to 16" diameter. Sizes such as 8-5/8" x 0.125", 10 3/4" x 0.156" and 12 3/4" x 0.188" which could not be formed on the original mill were successfully rolled with a higher production yield. In this installation, two of the four breakdown stands were removed. Instead of using four 75 HP motors, the forming was only powered by two 75 HP motors. The cage system required far less forming effort and consequently, the strip suffered far less stress and strain, and the tooling far less wear and tear. In fact, the first 50' length of skelp that was jogged through the mill was a sellable product.

Since then, Yoder has improved it's system with the use of an edgeforming stand and the availability of computer-controlled adjusting motors for cage changeovers in under 12 minutes. Recent successes include the 24" pipe mill conversion at IPSCO in Canada, and the 24" cage forming section for SeAH Steel (formerly Pusan Steel Pipe) in Korea.

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